

This listing of claims will replace all prior versions of claims in the application.

Claim 1. (original) A peptide compound selected from the group consisting of SEQ ID NO:1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, and 107.

Claim 2. (original) The peptide compound of claim 1, which is SEQ ID NO: 1.

Claim 3. (original) The peptide compound of claim 1, which is SEQ ID NO: 2.

Claim 4. (original) The peptide compound of claim 1, which is SEQ ID NO: 3.

Claim 5. (original) The peptide compound of claim 1, which is SEQ ID NO:
60.

Claims 6-7. (cancelled)

Claim 8. (original) A peptide compound which selectively binds to the extracellular portion of human PSMA and is at least 60% identical to a peptide compound selected from the group consisting of SEQ ID NO:1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, and 107.

Claim 9. (original) A peptide compound comprising amino acid residues 2-8 of a peptide compound selected from the group consisting of SEQ ID NO:1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, and 107.

Claim 10. (currently amended) A polypeptide comprising the peptide compound of ~~any one of claims 1-9~~ and a heterologous peptide.

Claim 11. (currently amended) The peptide compound of ~~claim 1~~ ~~any one of claims 1-10~~, further comprising a therapeutic moiety.

Claims 12-13. (cancelled)

Claim 14. (currently amended) A pharmaceutical composition comprising a peptide compound of ~~claim 1~~ ~~any one of claims 1-13~~ and a pharmaceutically acceptable carrier.

Claim 15. (original) A method for treating prostate cancer in a subject in of such treatment, comprising administering to the subject the pharmaceutical composition of claim 14.

Claim 16. (original) The method of claim 15, further comprising performing a procedure that removes or destroys prostatic tumor tissue.

Claim 17. (original) The method of claim 16, wherein the pharmaceutical composition comprising the peptide compound is administered to the subject prior to performing the procedure that removes or destroys prostatic tumor tissue.

Claim 18. (original) The method of claim 17, wherein the pharmaceutical composition comprising the peptide compound is administered for about 3-6 months prior to performing the procedure that removes or destroys prostatic tumor tissue.

Claim 19. (original) The method of claim 17, wherein the pharmaceutical composition comprising the peptide compound is administered for about 6-12 months prior to performing the procedure that removes or destroys prostatic tumor tissue.

Claim 20. (currently amended) The method of ~~claim 15~~ ~~any one of claims 16-19~~, wherein administration of the pharmaceutical composition comprising the peptide compound to the subject is continued after performing the procedure that removes or destroys prostatic tumor tissue.

Claim 21. (currently amended) The method of ~~claim 15~~ ~~any one of claims 16-20~~, wherein the procedure that removes or destroys prostatic tumor tissue is selected from the group consisting of radical prostatectomy, cryosurgery, external X-ray therapy, and interstitial X-ray therapy.

Claim 22. (currently amended) The method of ~~claim 15~~ ~~any one of claims 15-21~~, further comprising administering to the subject an antiandrogen.

Claims 23-26. (cancelled)

27. A method for identifying PSMA binding peptides comprising:
a) varying at least one amino acid residue of a peptide compound selected from the group consisting of SEQ ID NO:1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70,

71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, and 107; and

b) determining the ability of the peptide to bind to PSMA.